

Specimen treatment

1 x dressed

- briefly annealed while undressed
- dressed

2 x dressed

- briefly annealed while dressed
- dressed

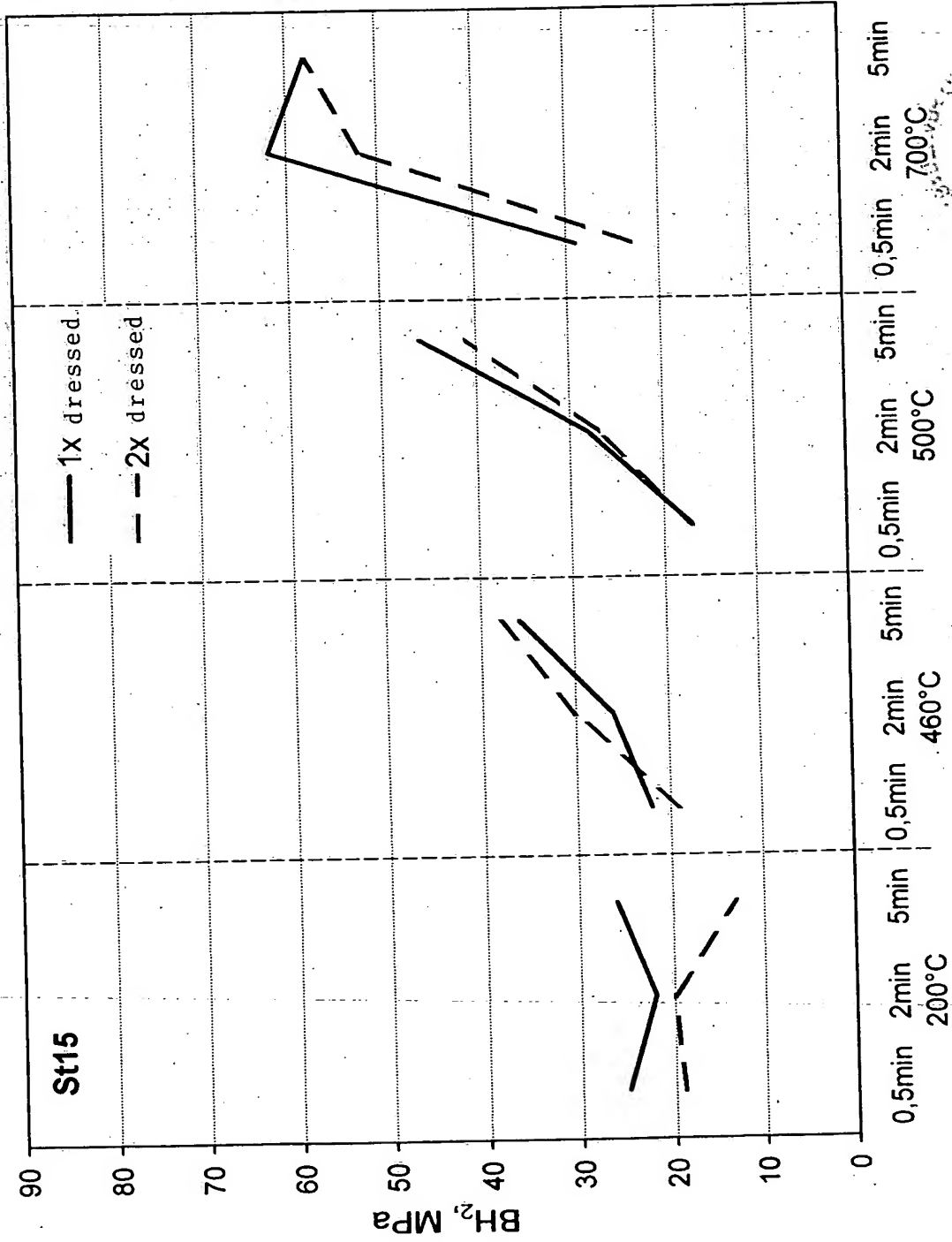


Fig 1

Specimen treatment

1 x dressed

- briefly annealed while undressed
- dressed

2 x dressed

- briefly annealed while dressed
- dressed

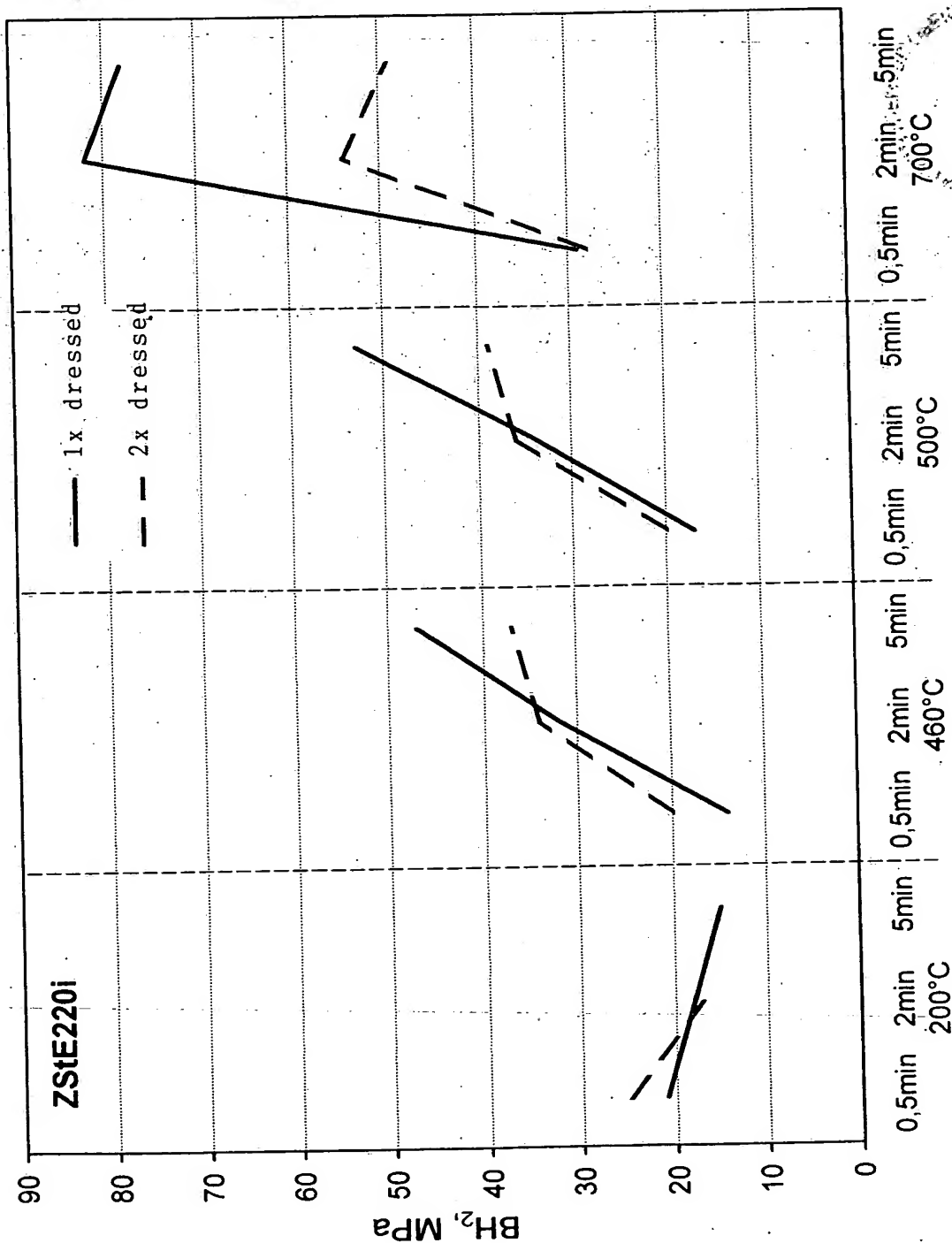


Fig 2

Specimen treatment

1 x dressed

- briefly annealed while undressed
- dressed

2 x dressed

- briefly annealed while dressed
- dressed

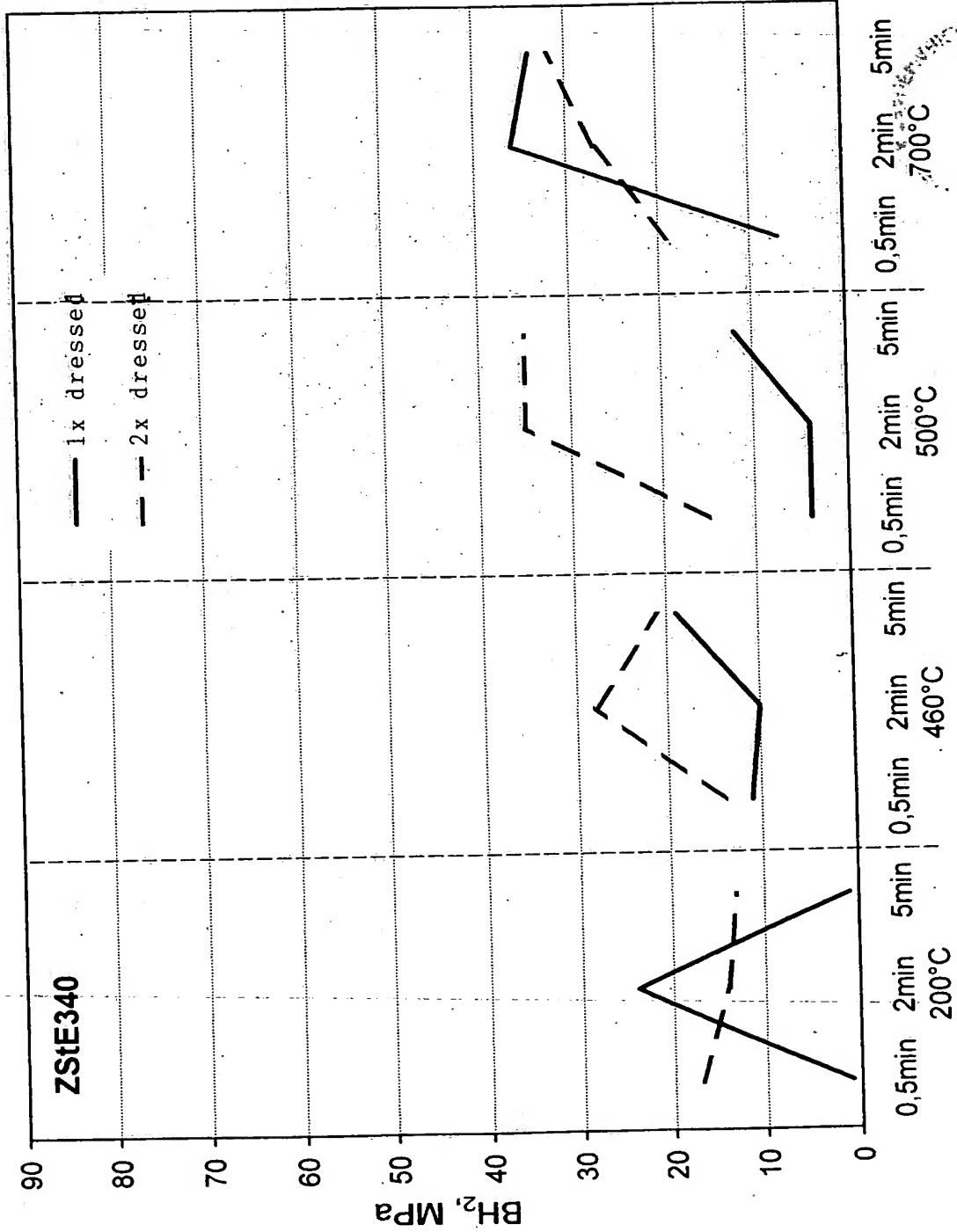
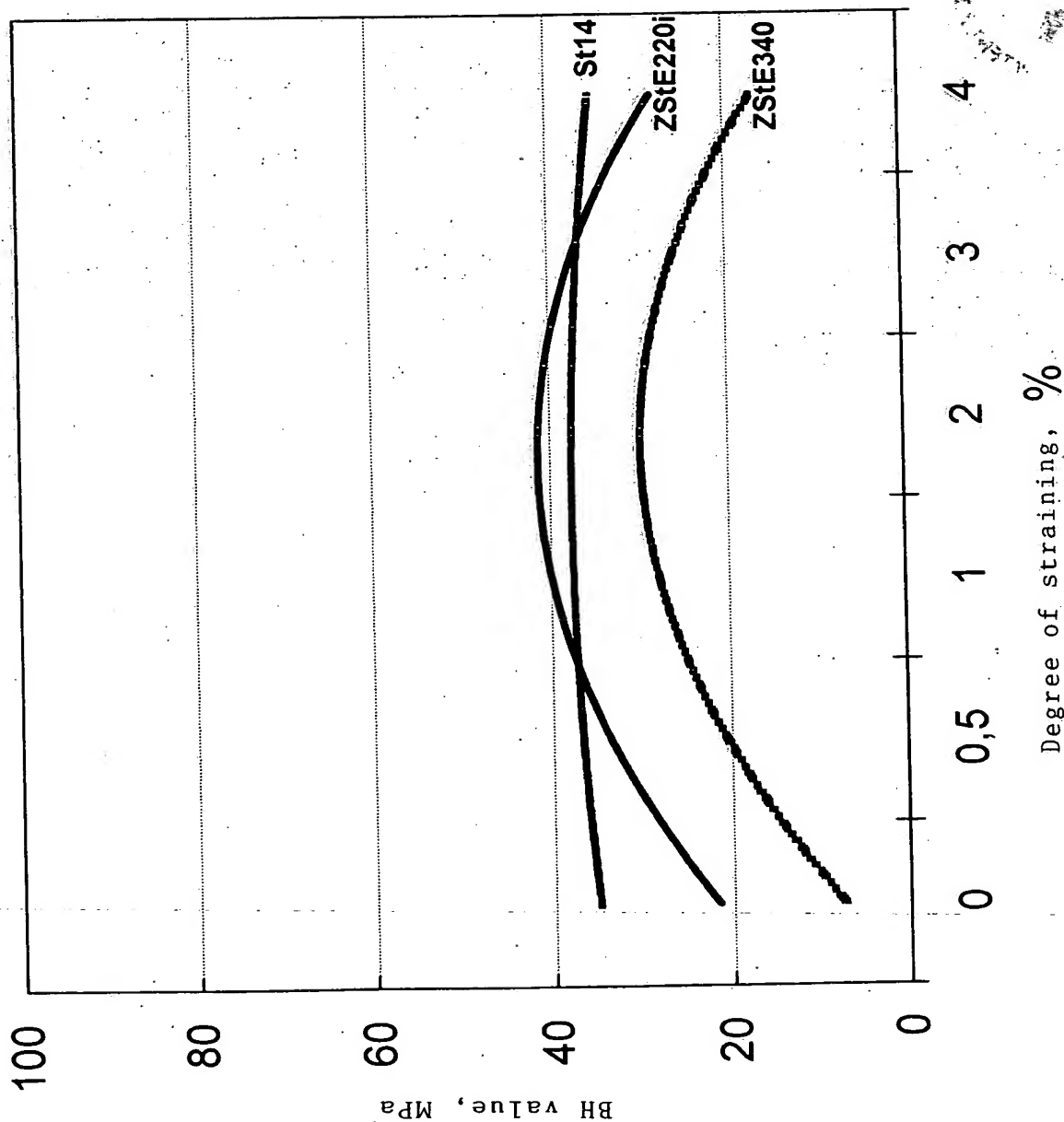


Fig. 3



— ZStE220i
— St14
— ZStE340

Specimen treatment

Undressed specimens

Annealing: 5 minutes at 500°C

Dressing 0.5% (St14)

0.8% (ZStE220i)

1.0% (ZStE340)

BH annealing: 20 minutes at 170°C

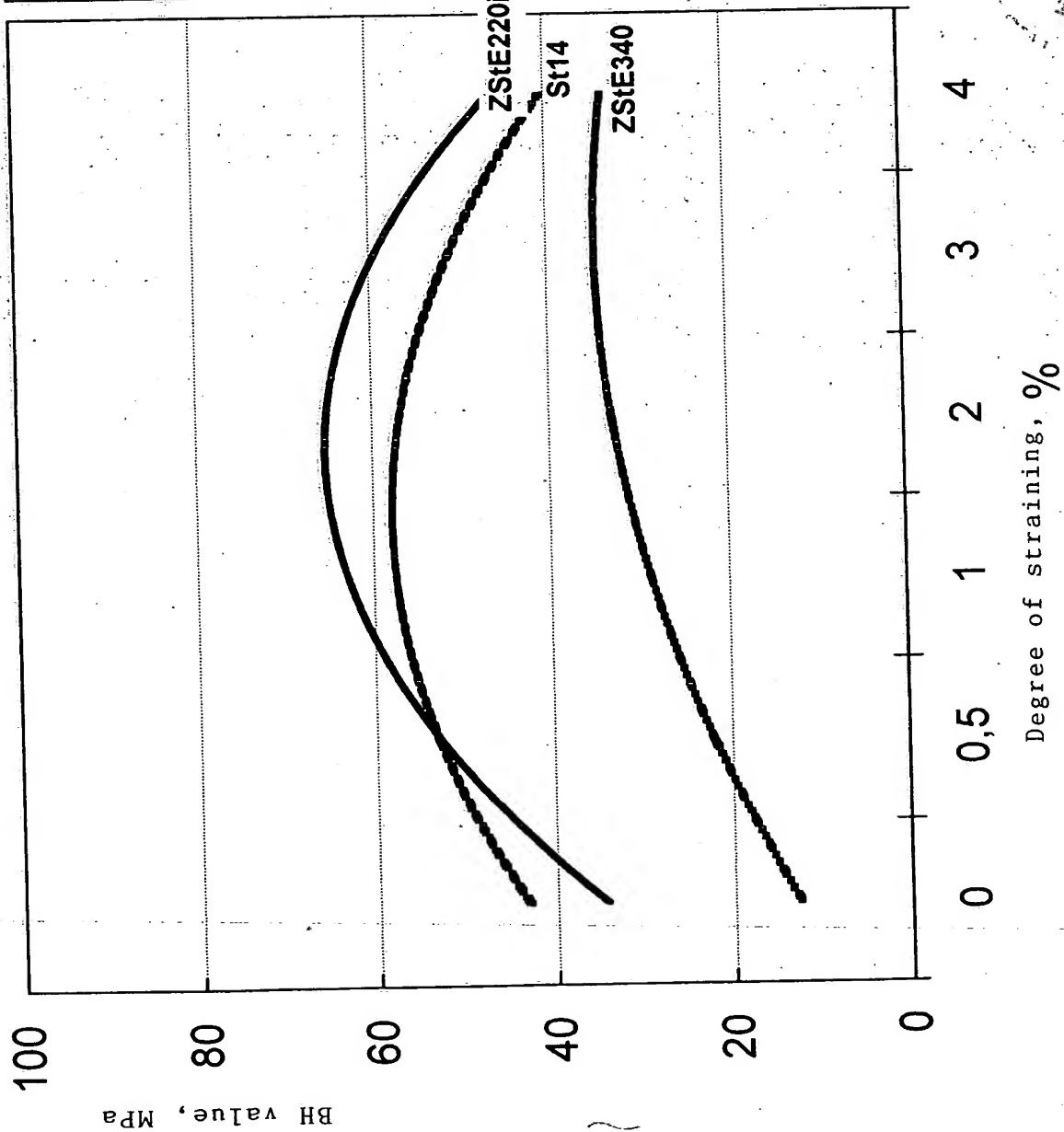
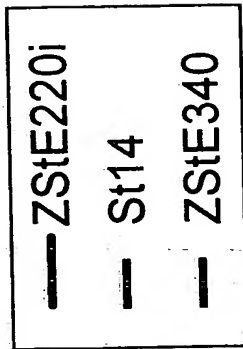
Fig. 4

BH value, MPa

Degree of straining, %

4/11

5/11



Specimen treatment
Undressed specimens
Annealing: 15 minutes at
500°C

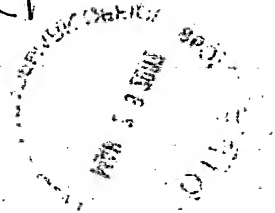
Dressing 0.5% (St14)

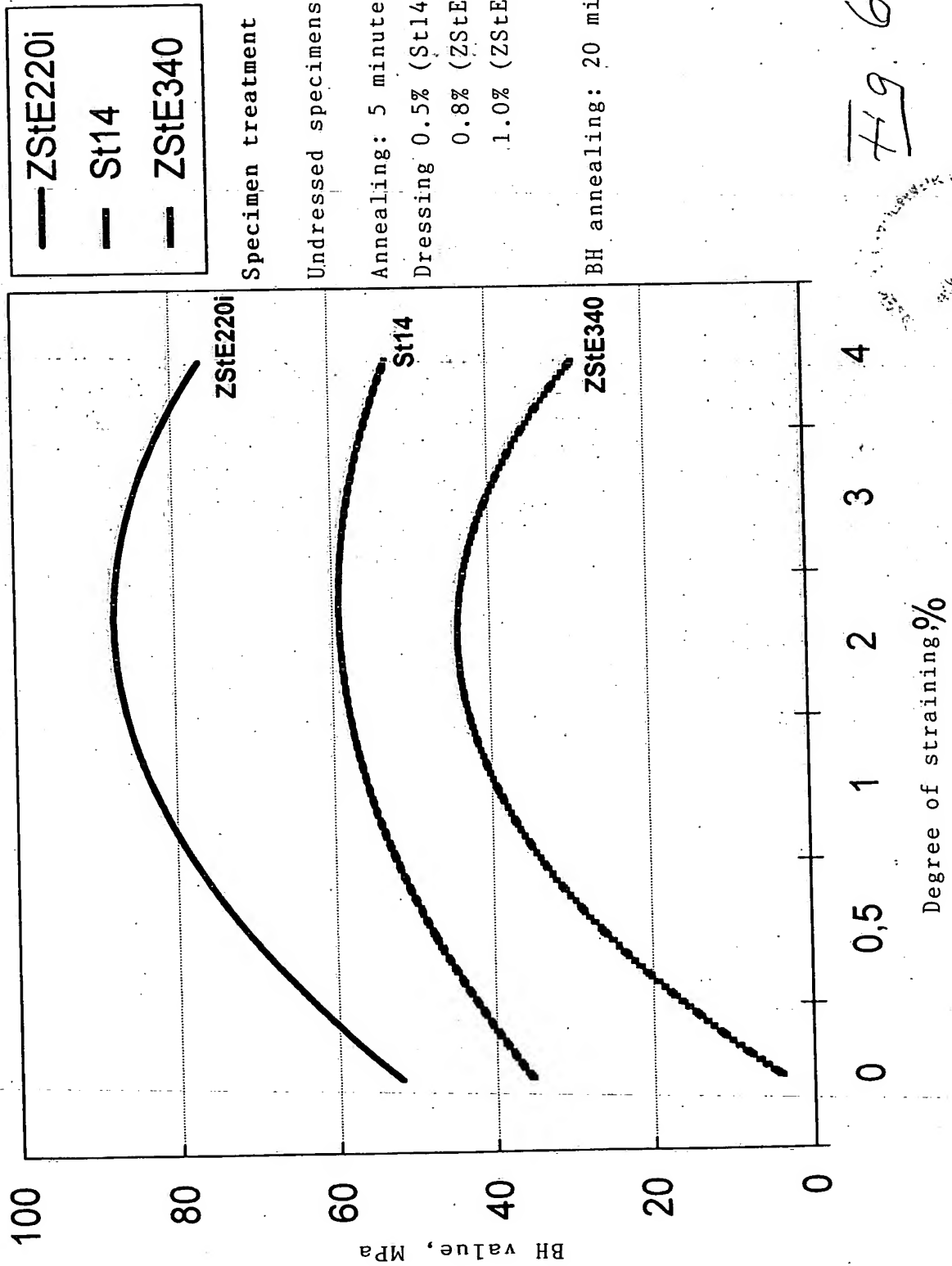
0.8% (ZStE220i)

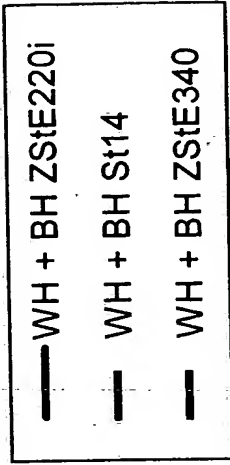
1.0% (ZStE340)

BH annealing: 20 minutes at
170°C

Fig. 5







Specimen treatment

Undressed specimens

Annealing: 5 minutes at 700°C

Dressing 0.5% (St14)

0.8% (ZStE220i)

1.0% (ZStE340)

BH annealing: 20 minutes at 170°C

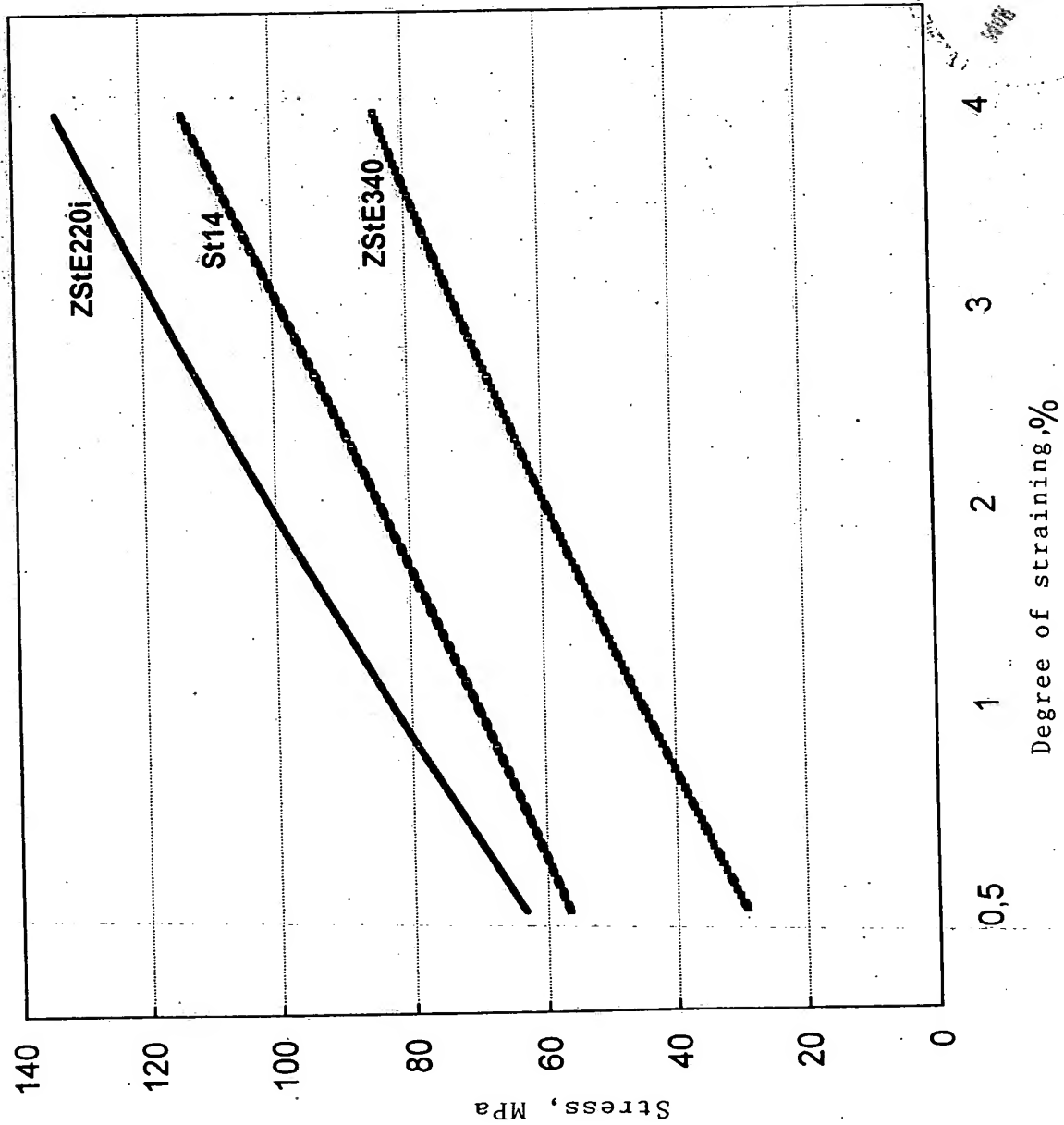


Fig 7



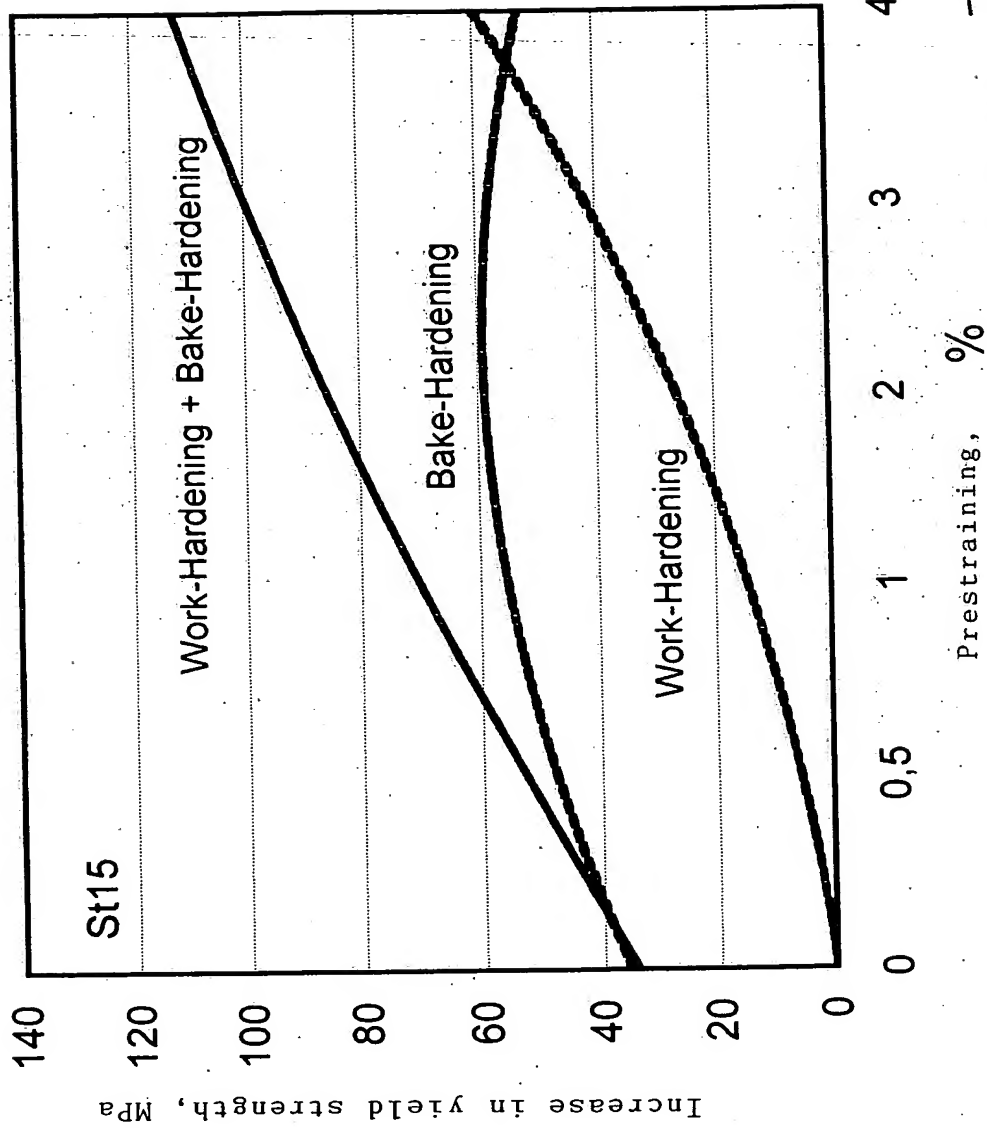
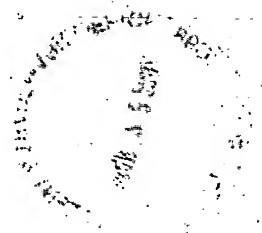


Fig. 8



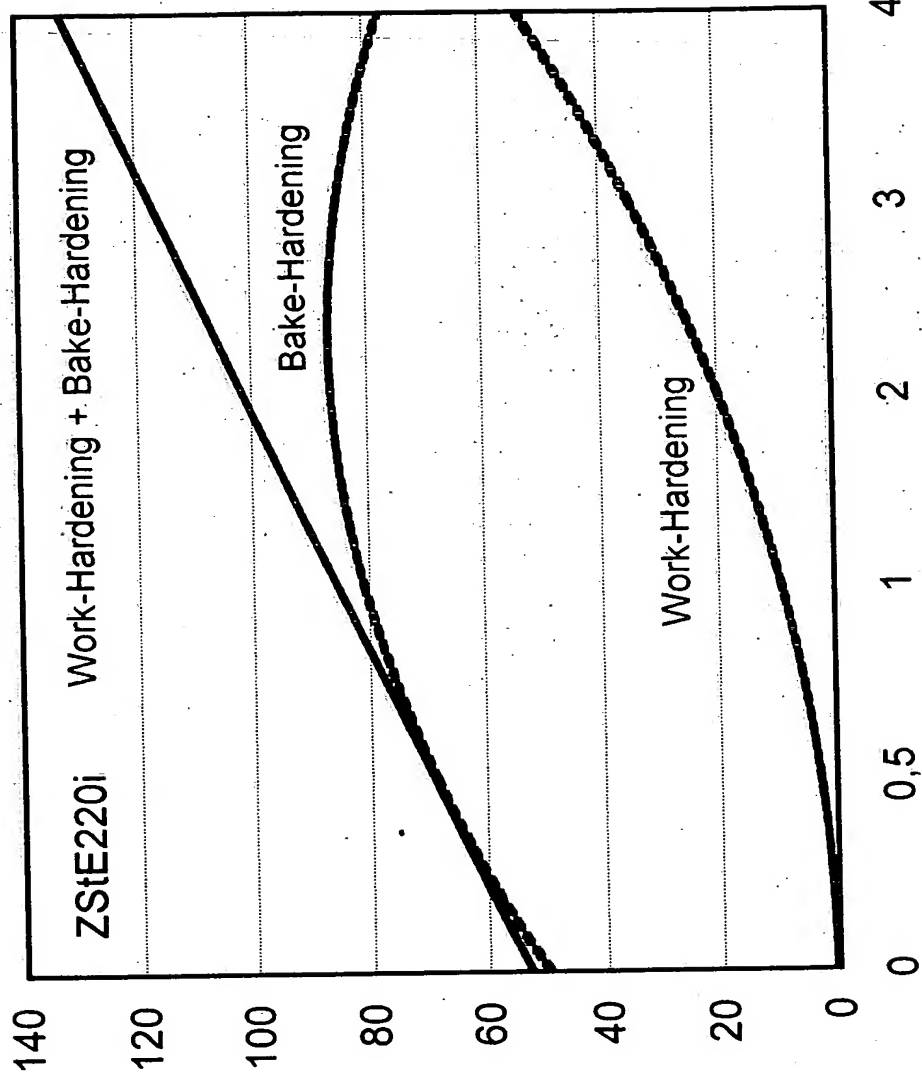
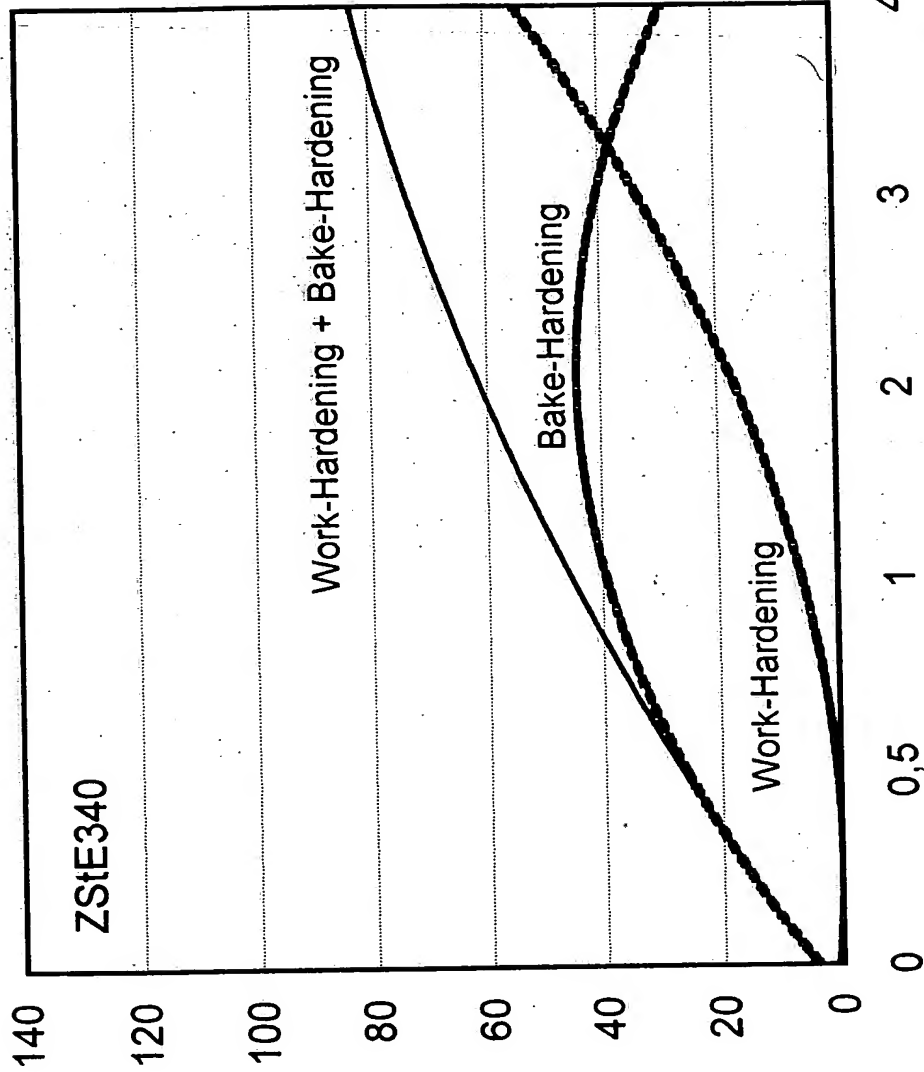


Fig 9



Prestraining, %

Increase in yield strength, MPa



Prestraining, %

79 10

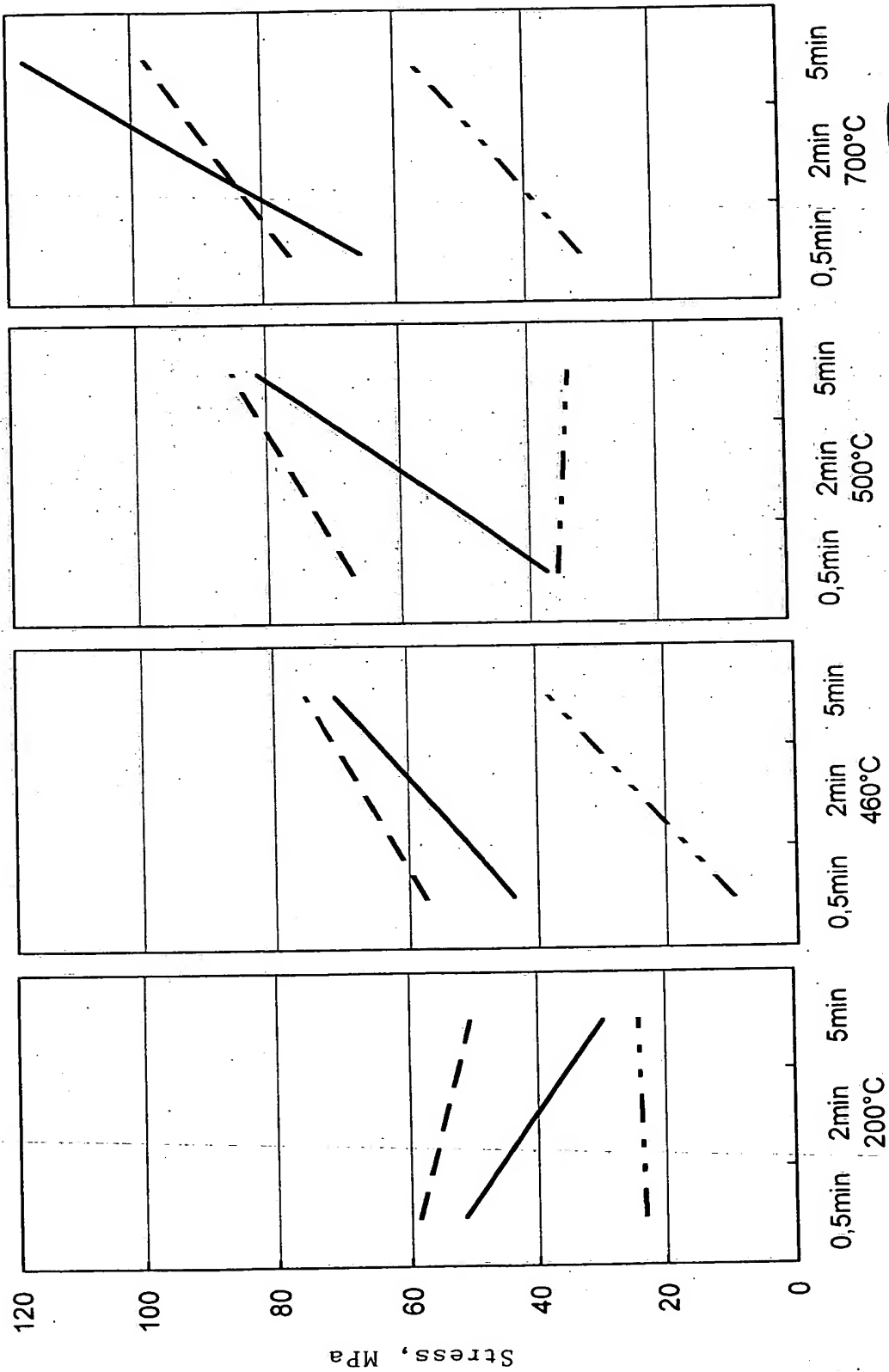


Fig 11

Annealing period and temperature of the additional annealing

-- WH + BH2 St15 — WH + BH2 ZStE220i — - WH + BH2 ZStE340 Specimen condition: briefly annealed while undressed, dressed